Robots Spur Software That Lends a Hand

Johnson Space Center

Universal Robotics
Nashville, Tennessee

NASA Technology

- With the Defense Advanced Research Projects Agency (DARPA), Johnson aimed to build a humanoid robot—Robonaut 1—to work alongside its human counterparts in space
- Johnson wanted to develop software to deliver automatic intelligence and learning in the robot

Partnership

- Dr. Richard Alan Peters, a professor at Vanderbilt, developed learning algorithms for robots, and under a NASA Cooperative Agreement, showed the algorithms could produce learned knowledge
- The work led to patents for Peters, who took the NASA-derived technology to a company called Universal Robotics, where the technology is now available in a product called Neocortex

Benefits

- Neocortex can improve efficiency and worker safety in places like warehousing, mining, handling hazardous waste, and more
- One popular use is for placing, stacking, or removing boxes from pallets or trailers
- It is currently being installed to robotically stack and package meat for a Fortune 500 company